WHAT IS CLAIMED IS:

1. A customer impact estimation system to evaluate impact to a customer by a revision of a technology process in microelectronics manufacturing, the system comprising:

a user interface configured to accept a predefined search scope and a predefined search scheme;

an extraction module, responsive to the user interface, configured to search and extract information of a customer who has used a design technical documents database, wherein the design technical documents database includes information related to the technology process; and

an estimation module configured to analyze the information of the customer and evaluate for the impact to the customer by the revision of the technology process.

2. The customer impact estimation system of claim 1, wherein the predefined search scope includes a period of time, a type of technology, and a physical region.

3. The customer impact estimation system of claim 1, wherein the predefined search scheme includes document title, document number, vendor, maker, and end customer.

4. The customer impact estimation system of claim 3 wherein the vendor comprises one of an electronic design automation (EDA) vendor, a chip service company, a library and intellectual property (IP) vendor.

5. The customer impact estimation system of claim 3 wherein the maker comprises one of a photomask maker, a wafer manufacturer, a testing facility, and a packaging facility.

6. The customer impact estimation system of claim 1, wherein the design technical document database includes at least a process document, and at least a technical file.

7. The customer impact estimation system of claim 6, wherein the process document includes product specification document, design rule manual, and simulation model document.

8. The customer impact estimation system of claim 6, wherein the technical file includes a design-rule-check (DRC) document, a layout-versus-schematic (LVS) document, and a RC extraction document.

9. The customer impact estimation system of claim 1 wherein the system is further connected to a virtual fab that is a network entity.

10. The customer impact estimation system of claim 9 wherein the virtual fab is further connected to at least one of a customer, a vendor, a manufacturer, and a design group.

11. The customer impact estimation system of claim 9 wherein the virtual fab comprises a plurality of database including the design technical document database.

12. The customer impact estimation system of claim 1 wherein the user interface further provides a search result to a user.

13. The customer impact estimation system of claim 1 wherein the extraction module searches relevant documents according to the predefined search scheme.

14. The customer impact estimation system of claim 13 wherein the extraction module searches for customers who have downloaded the relevant documents during the predefined search scope.

15. The customer impact estimation system of claim 14 wherein the extraction module extracts information of the customers through download history relevant documents.

16. The customer impact estimation system of claim 1 wherein the estimation module provides a list of customers who are impacted by the revision of the technology process.

17. The customer impact estimation system of claim 16 wherein the estimation module further provides a list of customers who are impacted by the revision of the technology process according to a quantitative criteria.

18. The customer impact estimation system of claim 1 wherein the estimation module provides a quantitative estimation of customer impact by the revision of the technology process according to a quantitative criteria.

19. The customer impact estimation system of claim 18 wherein the estimation module further provides a suggestion for a communication with relevant customers, vendors, and makers for the revision of the technology process.

20. A method to evaluate an impact to a customer caused by a revision of a specific technology process in microelectronics manufacturing, the method comprising:

providing a search scope to a user interface;

providing a search scheme to the user interface; and

searching, according to the search scope and the search scheme, a design technical documents database that includes information related to the technology process to determine a customer impacted by the revision.

21. The method of claim 20 wherein the search scope includes one of a period of time, a type of technology, and a physical region of a customer.

22. The method of claim 21 wherein the search scheme includes one of a document title, a document number, a vendor, a maker and an end customer.

23. The method of claim 20 wherein the type of technology includes 0.25 μm and above, 0.25 μm to 0.15 μm, 0.15 μm to 0.09 μm, and below 0.09 μm.

24. The method of claim 20 wherein a period of time includes one of 3 months, 6 months, and 12 months.

25. The method of claim 20 wherein the vendor comprises one of an electronic design automation (EDA) vendor, a chip service company, a library and intellectual property (IP) vendor.

26. The method of claim 20 wherein the maker includes one of a photomask maker, a wafer manufacturer, a testing facility, and a packaging facility.

27. The method of claim 20 wherein the design database comprises one of design rule check (DRC) database, layout versus schematic (LVS) database, and RC extraction database.

28. The method of claim 20 wherein the searching is implemented by a customer impact estimation system connected to a virtual fab.

29. The method of claim 28 wherein the searching is implemented through the virtual fab, wherein the virtual fab is a network entity.

30. The method of claim 29 wherein the virtual fab is connected to at least a customer, a vendor, a manufacturer, and a design lab.

31. The method of claim 20 further comprising:

specifying a change of process wherein the change of process is associated with a technical document; and

verifying validity of the change of process according to a set of predefined rules.

32. A method to evaluate an impact to a customer caused by a revision of a specific technology process in microelectronics manufacturing, the method comprising:

specifying a change of process wherein the change of process is associated with a technical document;

verifying validity of the change of process according to a set of predefined rules;

providing a search scope;

providing a search scheme;

implementing a search of a plurality of design databases according to the search scope and the search scheme; and

providing a result of the search.